

(b) selecting said received broadcast or cablecast program from the information transmission and transferring it to the output device for delivery to the user;

(c) detecting a specific first control signal in the information transmission and passing said detected specific first control signal to the computer; and

(d) controlling said computer based on the specific first control signal, said step of controlling comprising:

(1) generating a receiver specific datum by processing first information that is stored in said computer;

(2) placing said receiver specific datum at a specific memory location of the computer;

(3) communicating said receiver specific datum from said specific memory location to said output device; and subsequently

(4) clearing said receiver specific datum from said specific memory location;

whereby the combined or sequential output of said received broadcast or cablecast program and said receiver specific datum is delivered at said output device in the period of time between said step of placing said datum at said memory location and said step of clearing said datum from said memory location.

56. (New Claim) The method of claim 55, wherein the step of generating a receiver specific datum by processing information that is stored in the computer is achieved by executing a computer program stored in the memory of the computer to process said stored first information, said method further comprising the step of:

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detecting in said information transmission a second control signal which is effective to load the computer program into the memory of the computer.

57. (New Claim) The method of claim 56, wherein the information transmission incorporates said computer program.

58. (New Claim) The method of claim 56, wherein said second control signal is effective to instruct the computer to fetch said computer program from a memory peripheral.

59. (New Claim) The method of claim 55, wherein the combined or sequential output of said received broadcast or cablecast program and said receiver specific datum is delivered at the output device as part of a series of combined or sequential outputs.

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60. (New Claim) The method of claim 55, wherein at least one of the processing, generating, or outputting of said computer is controlled by a programmable controller in response to the control signals detected in the broadcast or cablecast information transmission.

61. (New Claim) The method of claim 60, further having one step from the group consisting of:

interrupting the controller to cause said computer to communicate said receiver specific datum at a specific time;

instructing the controller to cause said computer to communicate a specific receiver specific datum to said output device;

detecting an interrupt signal in the information transmission and controlling said controller to communicate said detected interrupt signal to said computer; and

detecting a control program in the information transmission and causing said controller to control one or more receiver station devices in accordance with said control program.

62. (New Claim) The method of claim 60, wherein said controller is capable of communicating an interrupt signal to a plurality of processor or controller devices, said method further comprising the step of programming said controller to interrupt a specific one of said plurality of devices.

63. (New Claim) The method of claim 55, wherein in response to the detection of said specific first control signal the computer is organized to generate said receiver specific datum as part of a series of receiver specific data, and a processor interrupt signal is inputted to the computer to enable the communication of one or more specific ones of said series to said output device at a specific time.

64. (New Claim) The method of claim 63, further having one step from the group consisting of:

clearing the specific memory location in response to said processor interrupt signal;  
placing said generated receiver specific datum at said specific memory location in response to said processor interrupt signal;; and

said computer responding to a second control signal detected in said broadcast or cablecast information transmission by ceasing to communicate said one or more specific ones of said series to said output device and commencing or resuming generating said series.

65. (New Claim) The method of claim 63, further comprising the steps of determining that said computer is not prepared to communicate a first receiver specific datum to said output device at a specific time and consequently causing said computer to execute a

specific computer program instruction thereby to commence generating a subsequent receiver specific datum of said series.

66. (New Claim) The method of claim 55, wherein said receiver specific datum is not automatically communicated to said output device when said receiver specific datum is placed at said memory location, said method further comprising the step of:

detecting in said information transmission a second control signal which is effective to instruct the computer to communicate the receiver specific datum at said memory location to said output device, thereby causing the computer to communicate said receiver specific datum to the output device.

67. (New Claim) The method of claim 55, wherein the first information that is stored in the computer comprises user specific data, said method further comprising the step of:

communicating update data to the computer to cause the stored user specific data to be updated, whereby in generating a subsequent receiver specific datum the updated user specific data are processed by said computer.

68. (New Claim) The method of claim 67, further having one step from the group consisting of:

detecting said update data in said information transmission;  
receiving said update data in a said information transmission distinct from said information transmission comprising a broadcast or cablecast program and at least one control signal; and  
initiating a telephone transmission to obtain said update data.

69. (New Claim) The method of claim 55, further comprising the steps of storing second information at the receiver station that specifies that said receiver station should automatically selectively receive a specific information transmission, and selectively receiving said information transmission in accordance with said stored second information.

70. (New Claim) The method of claim 69, wherein in response to an enabling second control signal the receiver station is enabled to receive said broadcast or cablecast program by inputting to a processor or said computer one or more computer program instructions capable of controlling said receiver station to receive said information transmission, select said broadcast or cablecast program, and detect said specific first control signal.

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71. (New Claim) The method of claim 69, wherein said second information includes advance information of transmission of said specific information transmission.

72. (New Claim) The method of claim 55, further comprising the steps of assembling records at the receiver station that chronicle at least one of the availability, selection, usage of at least one of broadcast or cablecast programs, control signals, or user data, and communicating said records to at least one remote data collection station.

73. (New Claim) The method of claim 55, further comprising the step of inputting to a processor or said computer at the receiver station information of a reaction of a user to an output at the output device.

74. (New Claim) The method of claim 73, further comprising the step of processing said user reaction information in response to a second control signal detected in the information

transmission, thereby to generate additional response information besides the inputted information.

75. (New Claim) The method of claim 74, further comprising the step of communicating at least some of said inputted information or said additional response information to a remote data collection station.

76. (New Claim) The method of claim 55, wherein at least a portion of the broadcast or cablecast program and said control signal are encrypted and are designated by a signal indicating an encrypted transmission, said method further comprising the step of controlling a decryptor in the receiver station to decrypt said at least a portion of said program and said control signal in response to detection of said designating signal.

77. (New Claim) The method of claim 55, further comprising the step of storing the received information transmission on a storage means to allow the delivery of the combined or sequential output at a time when said broadcast or cablecast program is not being received by the receiver station.

78. (New Claim) A receiver station apparatus for processing signals to deliver a combined or sequential output of a broadcast or cablecast program and a receiver specific computer generated datum, comprising:

an output device, said output device for delivering said program and receiver specific computer generated datum;

a decoder comprising means for:

- (1) receiving an information transmission comprising a broadcast or cablecast program and control signals;

(2) detecting the presence of the control signals in the information transmission; and

(3) passing the detected control signals;

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a computer, said computer being operatively connected to said output device and said decoder, said computer having a specific memory location connected to said output device for communicating data stored in said specific memory location to said output device, and said computer being programmed to perform the following steps based upon one or more specific control signals detected and passed from said decoder:

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(1) generating a receiver specific datum by processing information that is stored in said computer;

(2) placing said receiver specific datum in said specific memory location;

(3) communicating said receiver specific datum from said specific memory location to said output device; and subsequently

(4) clearing said receiver specific datum from said specific memory

location,

thereby delivering a combined or sequential output of said received broadcast or cablecast program and said receiver specific datum at said output device in the period of time between said step of placing said datum at said memory location and said step of clearing said datum from said memory location.

79. (New Claim) A method of communicating mass medium program material from a transmitter station to a plurality of receiver stations each of which includes a broadcast or cablecast program receiver, an output device, a control signal detector, a computer, and with each said receiver station adapted to detect the presence of at least one control signal, to generate a

receiver specific datum in response to a detected specific control signal, and to deliver at said output device a combined or sequential output of a broadcast or cablecast program and the receiver specific datum, said method comprising the steps of:

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- (1) receiving at a transmitter station a program to be transmitted and delivering the program to a transmitter;
  - (2) receiving and storing at said transmitter station a control signal which at the receiver station operates to generate a receiver specific datum; and
  - (3) communicating said control signal to the transmitter at a specific time, thereby to transmit an information transmission comprising the program and said control signal.

80. (New Claim) The method of claim 79, wherein a memory location is operatively connected to a computer at said transmitter station and said control signal is received and stored at said memory location, said method further comprising the steps of:

detecting a transmitter generate signal at the transmitter station which is effective to generate at least a portion of said control signal prior to said step of receiving and storing said control signal; and

inputting said detected transmitter generate signal to said computer thereby to cause said computer to generate said at least a portion of said control signal.

81. (New Claim) The method of claim 80, further comprising the step of programming said computer to respond to said transmitter generate signal by processing information stored in said computer in order to generate said at least a portion of said control signal.



82. (New Claim) The method of claim 80, wherein said computer generates specific formula-and-item-of-this-transmission information in response to said transmitter generate signal, further comprising the step of inputting formula-and-item data to said computer.

83. (New Claim) The method of claim 82, wherein said transmitter generate signal or said formula-and-item data is received at said transmitter station in a broadcast or cablecast information transmission transmitted by a remote station, said method further comprising the steps of receiving an instruct signal from said remote station and transmitting said formula-and-item-of-this transmission in response thereto.

84. (New Claim) The method of claim 80 wherein said at least a portion of said control signal generated by said computer in response to the transmitter generate signal includes some portion of one of a computer program and a data module.

85. (New Claim) The method of claim 79 wherein said control signal includes a computer program, further comprising the step of causing a memory location at said transmitter station to communicate a computer program to said transmitter to transmit said computer program, thereby to cause at least one receiver station to load said computer program at a processor and cause said processor to generate and output information under the control of said computer program.

86. (New Claim) The method of claim 85, further comprising the step of assembling said computer program into a message with a plurality of segments, said computer program being located in a specific portion of said message and said message including information that causes at least one receiver station to input said computer program to a selected one of a plurality of processors.

87. (New Claim) The method of claim 85, further comprising the steps of causing said memory location to communicate an instruct signal to a computer at said transmitter station in order to generate a portion of said computer program at said computer in response thereto.

88. (New Claim) The method of claim 79, wherein said program transmitted by said transmitter station includes one or more of a video, an audio and a data signal received from a remote station, said method further comprising the step of storing said received one or more of a video, an audio and a data signal for a period of time, whereby transmission of said received one or more of a video, an audio, and a data signal is delayed.

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89. (New Claim) The method of claim 79, wherein a controller at said transmitter station controls the passing of a specific received signal, said method further comprising the steps of detecting embedded information in said specific received signal and controlling the passing of said specific received signal on the basis of said detected embedded information.

90. (New Claim) The method of claim 89, wherein said controller controls a switch, said method further comprising controlling said switch to communicate signals selectively from one or more program input receivers and one or more memory locations to one or more memory locations and one or more transmitters.

91. (New Claim) The method of claim 90, wherein said transmitter station transmits a plurality of messages to one of said plurality of receiver stations to control said one receiver station to deliver said combined or sequential output of said program and said receiver specific datum at the output device, said method further comprising the steps of communicating a signal containing at least one of said plurality of messages from a program input receiver to a memory

location and subsequently communicating said signal containing said at least one of said plurality of messages from said memory location to a transmitter.

92. (New Claim) The method of claim 91, further comprising the step of controlling said switch on the basis of the presence or absence of an instruct signal stored with a program.

93. (New Claim) The method of claim 89, wherein said transmitter station stores at least one program, said method further comprising the steps of receiving said program at a program input receiver, communicating said program to a storage device, and storing said program at said storage device with an instruct signal which is effective at the transmitter station to control one of said computer and said controller.

94. (New Claim) The method of claim 93, further comprising the steps of detecting said instruct signal at said transmitter station and communicating said instruct signal to one of said computer and said controller.

95. (New Claim) The method of claim 79, wherein said transmitter station includes a plurality of program input receivers, said method further comprising the steps of processing signals received at said plurality of program input receivers, communicating control information in response to an embedded datum in one of said signals, and controlling the passing of a signal received at a specific one of said plurality of program input receivers on the basis of said communicated control information.

96. (New Claim) The method of claim 79, wherein said program and said control signal are received from one or more remote stations, said method further comprising the steps of processing a first signal received from said one or more remote stations and controlling said

transmitter station to communicate said program to a transmitter, or said control signal to a computer at said transmitter station, on the basis of information in said processed, received first signal.

97. (New Claim) The method of claim 79, further comprising the steps of receiving said program at a receiver in the transmitter station, communicating said program from said receiver to a memory location, and storing said program at said memory location for a period of time prior to communicating said program to a transmitter.

98. (New Claim) The method of claim 97 wherein the program is delivered to and transmitted from a selected one of a plurality of transmitters.

99. (New Claim) The method of claim 79, wherein a switch at said transmitter station communicates received signals selectively from at least one receiver and at least one memory location to said transmitter, said method further comprising the steps of inputting a signal which is effective at the transmitter station to instruct communication, and controlling said switch to communicate a received signal from a receiver to a memory location in response to said instruct signal.

100. (New Claim) The method of claim 99, wherein said received signal contains said program, said method further comprising the step of controlling said switch to communicate said program to said transmitter.

101. (New Claim) The method of claim 79, wherein a plurality of signals is received from one or more remote stations at said transmitter station, said method further comprising the

steps of selecting one or more of said plurality of signals, and communicating each selected signal to a storage device.

102. (New Claim) The method of claim 101, wherein one or more of said selected signals is a signal which is effective at the transmitter station to instruct one of transmitter station computer and a controller, said method further comprising the step of causing a memory location at said storage device to communicate said instruct signal and controlling said one of said computer and said controller in response to said instruct signal.

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103. (New Claim) The method of claim 79, wherein a plurality of signals is received from one or more remote stations at said transmitter station and at least one is stored at said transmitter station which is operative to schedule transmission, said method further comprising the steps of programming said transmitter station to store the schedule and causing said transmitter to transmit in accordance with the schedule.

104. (New Claim) The method of claim 103, further comprising the step of causing said transmitter station to generate, in accordance with the schedule, signals to be transmitted.

105. (New Claim) The method of claim 79, further comprising the steps of receiving at said transmitter station an information transmission from a remote station, detecting in the information transmission an instruct signal which is effective at the transmitter station to execute an instruction set, loading and executing an instruction set at a transmitter station computer in response to said instruct signal, and on the basis of said instruction set, selecting information to be processed at a receiver station or communicating information to be associated with said program.

106. (New Claim) The method of claim 79, wherein a controller at said transmitter station controls a memory location to communicate to said transmitter a selected control signal, said method further comprising the steps of detecting a first instruct signal which is effective at the transmitter station to instruct transmission, and inputting said first instruct signal to said controller thereby to cause said memory location to communicate a selected control signal.

107. (New Claim) The method of claim 106, further having one step from the group consisting of:

programming said controller to respond to a said first instruct signal by controlling a selected memory location to communicate a control signal or by causing a memory location to communicate a selected control signal;

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inputting to a control signal detector at said transmitter station a broadcast or cablecast information transmission received from a remote station; and

storing said first instruct signal at said memory location with said program.

108. (New Claim) The method of claim 106, further comprising the steps of storing said first instruct signal at said transmitter station, and controlling said memory location to communicate a selected control signal at a scheduled time according to said first instruct signal.

109. (New Claim) The method of claims 106, further comprising the step of controlling said memory location to communicate said program to said transmitter in response to a second instruct signal.

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110. (New Claim) The method of claim 109, further comprising the steps of detecting a selected control signal communicated from said memory location and programming a controller to respond to a control signal communicated from said memory location.

111. (New Claim) The method of claim 106, further comprising the step of embedding first instruct signal in said program thereby to enable said controller to respond to said embedded first instruct signal at a time when said program is being communicated.

112. (New Claim) The method of claim 79, further comprising the steps of storing a transmitter generate signal which is effective at the transmitter station to to generate at least a portion of said control signal , and controlling a computer at said transmitter station to process stored information according to said stored transmitter generate signal.

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113. (New Claim) The method of claim 79, further comprising the steps of storing and transmitting to a receiver station data that specifies a time of transmission of or a channel of transmission of or some subject matter of a specific program, and subsequently transmitting said program in accordance with said specified data thereby to enable said receiver station to select and store or select and output said program.

114. (New Claim) The method of claim 79, further comprising the steps of transmitting to a receiver station a second control signal to cause said receiver station to align to a parallel processing system and select and input to a receiver station computer some information associated with said program or said control signal transmitted in a broadcast or cablecast information transmission and cause said computer to process stored information and generate output in response to said inputted information.

115. (New Claim) The method of claim 79, further comprising the steps of communicating to a signal generator at said transmitter station data that specifies a time of transmission or a channel of transmission or some subject matter of said program or said control signal and adding said communicated data or said control signal to a specific part of a broadcast

or cablecast information transmission or adding said communicated data or said control signal to a broadcast or cablecast information transmission in a message of a specific format.

116. (New Claim) The method of claim 79, further comprising the steps of causing a memory location at said transmitter station that is capable of storing and communicating a synchronize control signal which is effective at the receiver station to synchronize, to communicate said synchronize control signal to a transmitter to transmit said synchronize control signal, thereby to cause at least one receiver station to commence executing selected controlled functions programmed at said one station in response to said synchronize control signal and selected information in said information transmission transmitted by said transmitter.

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117. (New Claim) The method of claim 79, further comprising the steps of causing a memory location at said transmitter station that is capable of storing and communicating an interrupt signal which is effective at the receiver station to interrupt, to communicate said interrupt signal to a transmitter to transmit said signal, thereby to cause at least one receiver station to interrupt the processing of a selected computer, controller, or processor in response thereto.

118. (New Claim) The method of claim 79, further comprising the steps of causing a memory location at said transmitter station that is capable of storing and communicating a signal which is effective at the receiver station to serve as a source from which to select a receiver specific datum to be generated for output in response to said control signal, to communicate said signal to a transmitter to transmit said signal, thereby to cause at least one receiver station to select a receiver specific datum to be generated for output in response to said control signal.



119. (New Claim) The method of claim 79, further comprising the steps of causing a memory location at said transmitter station that is capable of storing and communicating a second control signal which is effective at the receiver station to cease combining or outputting, to communicate the second control signal to a transmitter to transmit said second control signal, thereby to cause at least one receiver station to cease combining or outputting its generated receiver specific datum at a specific time.

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120. (New Claim) The method of claim 79, further comprising the steps of causing a memory location at said transmitter station that is capable of storing and communicating a second control signal which at the receiver station operates to combine or output, to communicate the second control signal to a transmitter to transmit said second control signal, thereby to cause to at least one receiver station to deliver a combined or sequential output of said received broadcast or cablecast program and said receiver specific datum at its output device at a specific time.

121. (New Claim) The method of claim 79, further comprising the steps of causing a memory location at said transmitter station that is capable of storing and communicating a second control signal which at the receiver station operates to clear a generated receiver specific datum, to communicate said second control signal to a transmitter to transmit said second control signal, thereby to cause at least one receiver station to clear its generated receiver specific datum in response thereto.

122. (New Claim) The method of claim 79, further comprising the step of detecting at said transmitter station a transmitter generate signal which is effective at the transmitter station to

instruct generation of at least a portion of said one control signal, in one of a television signal and a radio signal or at a memory location that stores one of a television program or a radio program.

123. (New Claim) The method of claim 79, wherein said transmitter station receives from a subscriber station some information of a reaction of a subscriber to a television programming or computer output presentation, said method further having at least one step of the group consisting of:

transmitting to said subscriber station a computer program that processes some information of said reaction of a subscriber to a television programming or computer output presentation;

refining some variable of an instruct signal on the basis of said reaction of a subscriber to a television programming or computer output presentation; and

transmitting some portion of a television program or an instruct signal on the basis of said reaction of a subscriber to a television programming or computer output presentation.

124. (New Claim) The method of claim 79, further comprising transmitting a plurality of programs and one or more second control signals which are effective at a subscriber station to analyze a value or generate a schedule, thereby to cause at least one subscriber station to select one of said plurality of programs on the basis of its potential value to a subscriber or to output two or more of said programs in a receiver specific order.

125. (New Claim) A transmitter station apparatus for processing signals and communicating mass medium program materials to present at each of a plurality of receiver stations a combined output of a broadcast or cablecast program and a receiver specific computer generated datum, with each of said receiver stations having an output device for receiving and

delivering the broadcast or cablecast program and other information, said station also having a microcomputer with a specific memory location operatively connected to said output device for storing and outputting information to said output device, said transmitter station apparatus comprising:

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a broadcast or cablecast transmitter for communicating to a plurality of receiver stations an information transmission;

a program input receiver operatively connected to said transmitter for communicating the program to said transmitter;

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a memory or recorder operatively connected to said transmitter for storing and communicating a first control signal which at the receiver station operates to generate the receiver specific datum; and

an input device operatively connected to said memory or recorder for causing said memory or recorder to communicate said first control signal at a specific time to said transmitter, thereby to communicate said information transmission, said information transmission comprising said program and said first control signal, to said receiver stations and cause each of said plurality of receiver stations to deliver said program at its output device, generate a receiver station specific datum, place its receiver station specific datum at its memory location for a period of time, and deliver a combined output of said broadcast or cablecast program and its receiver station specific datum at its output device.

126. (New Claim) A transmitter station apparatus for processing signals and communicating mass medium program materials to present at each of a plurality of receiver stations a combined or sequential output of a broadcast or cablecast program and a receiver specific computer generated datum, with each of said receiver stations having an output device

for receiving and delivering the broadcast or cablecast program and other information, said station also having a computer with a specific memory location operatively connected to said output device for storing and outputting information to said output device, said transmitter station apparatus comprising:

a broadcast or cablecast transmitter for communicating to a plurality of receiver stations an information transmission comprising a program and one or more control signals;

a program input receiver operatively connected to said transmitter for communicating the program to said transmitter;

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Cont a memory or recorder operatively connected to said transmitter for storing and communicating at least a first control signal of said one or more control signals which at the receiver station operates to generate the receiver specific datum; and

an input device operatively connected to said memory or recorder for causing said memory or recorder to communicate said control signal at a specific time to said transmitter, thereby to communicate said program and said one or more control signals to said receiver stations and cause each of said plurality of receiver stations to deliver said program at its output device, generate a receiver station specific datum, place its receiver station specific datum at its memory location for a period of time, and deliver a combined or sequential output of said broadcast or cablecast program and its receiver station specific datum at its output device.

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15 127. (New Claim) A method of communicating mass medium program material to a plurality of receiver stations each of which includes a broadcast or cablecast program receiver, an output device, a control signal detector, a computer with a specific memory location capable of communicating to said output device, and with each said receiver station adapted to detect the presence of control signals, to generate a receiver specific datum in response to a detected

specific control signal, and to deliver at said output device a combined or sequential output of a broadcast or cablecast program and the receiver specific datum, said method comprising the steps of:

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- (1) receiving at a transmitter station a program to be transmitted;
  - (2) receiving at said transmitter station a first control signal which at the receiver station operates to generate the receiver specific datum;
  - (3) receiving a second control signal which operates at said transmitter station to communicate one of said program and said first control signal to a transmitter; and
  - (4) transmitting an information transmission comprising said program and said first control signal.
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128. (New Claim) The method of claim 127, wherein said second control signal is operative to control an intermediate transmission station to transmit said information transmission to at least one of said plurality of receiver stations, said method further comprising the step of transmitting said second control signal to said intermediate transmitter station.--